# **Grace Hopper Celebration 2020**





Have you ever thought about the first person to eat honey?



I mean, just consider it for a moment. You look out at this swarm of stinging insects—a swarm of them!—that will literally do anything to defend their hive, and you decide it's worth it to go in after this sticky yellow stuff they've made in there?



Or what about the first people to strap some blades to the bottom of their boots and glide out onto a frozen pond?



One more: What about the Wright brothers? Orville and Wilbur flipped a coin to determine who would attempt the first powered flight. And you know, Wilbur

won the coin toss but damaged the plane, and Orville's second attempt became recorded as the first successful powered flight.



The common thread in all those examples is bravery. Someone assessed the landscape, knew the risks, and did it anyway. And because those people chose to be brave – to risk injury, embarrassment, even death, their outcomes are just part of life now.

We've pursued leadership roles, because we want to follow the example of those risktakers who brought us honey, ice skating, and flying. We want to take thoughtful chances. We want to move forward—not just our teams, not even just our industry—but everything it has the potential to shape... the world.

When you think about bravery in software development, it's a bit different than some of those wrapped-up-with-a-bow stories. That bravery might start with one audacious vision, but it comes to life not through one act but a series acts — most often spread across a group of people—that shape the way software evolves and grows. Because without small acts of bravery, software becomes obsolete and fails to meet its objective of bringing value to customers. Without acts of bravery, we don't grow or thrive.

I'm here to tell you a story about bravery – a story about a transformation that unfolded at the company where I serve as Vice President of Product Management: Blackbaud.



I also want to share with you some insights on how that transformation shaped other important cultural elements, including the way our company responded to COVID-19 and the emphasis we've placed on building a diverse and inclusive workplace.



Without the culture shift I'm going to tell you about today, we wouldn't have been positioned to quickly source feedback and just as quickly build technology to overcome specific challenges related to the pandemic. And we wouldn't be recognized for our gender parity, an anomaly in the tech world.



First, a little background about Blackbaud, in case you're not familiar: We are the world's leading cloud software company powering social good and one of the 30 largest cloud software company in the world.



We offer cloud software, services, data intelligence, and expertise to the entire social good community—arts and cultural organizations, companies, faith communities, foundations, healthcare organizations, higher education institutions, K-12 schools, nonprofit organizations, and individual change agents. We have the privilege of providing tools to help people and organizations change the world—one community, one cause at a time.

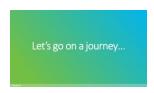


Our team's efforts do things like ensure that any person who purchases a ticket to a museum can start a lifelong relationship with its work. Or make the student

scholarship process simple and accessible for all in need. Or make it possible for every hungry kid to get meals all summer long.

Our customer base is a huge source of pride, of course, but it's also humbling. Important, life-changing outcomes are on the line based on the way we work. We want to deliver in the best way possible so that our customers, in turn, can deliver to those who depend upon them. They *deserve* the best technology has to offer.

And what's really cool is that, amidst serving as a partner to people and organizations changing the world, our workforce is gender equal. You might have seen on my earlier slide that we were honored by Forbes recently as one of America's best employers for women.



Today I want to tell you about a journey our company took, a transformative journey all about giving those customers the best technology possible.

We had great potential: an incredible, inspiring customer base, a best-in-breed software solution, and 600 engineers excited to jump in.

But we also faced a big challenge. Our flagship fundraising solution, Raiser's Edge, distinguished us as a company.





It's a product that we developed over the course of 15 years—the Swiss Army knife of fundraising solutions and the undisputed leader in the industry. We provided a single platform where fundraisers could track, cultivate, and thank and grow donors, using data to guide them through successful campaigns and then

even bigger successful campaigns—while knowing, with real numbers, exactly what was possible.

And, over the years, we'd added other software to help our customers run their business—Financial Edge for their finance team, grants management solutions, marketing solutions, and more.



But here was the challenge: we needed to innovate. As great as the software was, it was on premises, and we knew we needed to take our customers to the cloud to give them the agility, scalability, and security they needed to thrive in the future.

Our customers had to be willing to adapt. A lot of them loved their software. They are doing great, important work and they don't want to have to make a big change.

- Our customers operate on EXTREMELY thin margins, thinner than in many other sectors.
- Our customers face EXTREME scrutiny from their stakeholders on their costs and technology
- As a result, we have an incredible level of accountability to deliver value—and an incredibly OPPORTUNITY to deliver what they deserve: the best.

Right now, we're getting ready to host our 21<sup>st</sup> bbcon, the tech conference for a better world, October 6 to 8—our first virtual-only, global bbcon in fact—and it reminded me of a bbcon around 2005. We asked how many people would be interested in taking their Blackbaud solutions to the cloud. You know how many people raised their hands? ZERO.

The potential of cost was scary. The potential of change was scary. And people just didn't want to risk losing what they saw as the good thing they had!

Even naysayers within our own team reiterated that customers didn't want cloud technology.

But this was 2005, not 1995. Facebook, Google, and Amazon were already shipping an outrageous number of updates a day, and these same customers personally used and loved that platform.

Moreover, we believed that our customers didn't deserve technological leftovers. Organizations driving good in the world address complex sets of problems as they secure resources, manage operations, deliver programming and measure results. If we were ever going to be able to provide them software with the agility to GROW as they did and flex with their needs—software that could truly CONNECT their offices and break down silos—we needed to be in in the cloud.

CHANGES IN OUR
Technology
Processes
People
Culture

So we started building. We took a brave stance that we would keep moving and convert the detractors as we went. Rather than forcing a migration, we would create something so delightful, so excellent that our customers themselves would see the value and CHOOSE to join us on this journey.

For the team at Blackbaud, our act of bravery took a few years—a lifetime in our sector but a breakneck pace for the amount of change we implemented. We made the decision to shift our entire business model from on-premises software to cloud solutions, and we committed to doing it immediately.

It took changes in technology and architecture, in how we worked together, and in our very culture. And man, it made bee stings look like a cake walk!

We knew early on that we would NOT recreate from the ground up something that took hundreds of developers 10 years to build. Instead of editing all the monolithic code, we relied on microservices.

Rather than change it from the inside out, we went from the outside in — but we didn't just adorn our industry-leading product with glittery new little features that wouldn't address the core issue.

Instead, we built microservices that would work with our existing product, while allowing us to transition to a more modern, cloud-based platform. It wasn't the easy way, but it was the right way.

It also marked the first step in a solution-led growth strategy that relies on product capabilities as the driver of customer acquisition and retention. In contrast to a sales-led approach, solution led growth considers end users first.

The French-born American industrial designer Raymond Loewy popularized the MAYA concept: "most advanced, yet acceptable." His theory held: "To sell something surprising, make it familiar. To sell something familiar, make it surprising." We worked to do both – offering surprisingly delightful ways to do familiar things and making the new things we would enable our customers to do feel familiar.

Rather than re-build from scratch, we took a microservices approach. Consider the alternative: A single, monolithic service introduces risk. When everything is connected, it can all go down like dominos. Plus, it's tough to be creative and agile with a single service, because you can't turn a cargo ship with something as slim as a crane, but you certainly can transport and stack and rearrange each individual piece of cargo just fine.

Relying on old code is bad, and churn is bad. With microservices, we could provide something new for our customers. We wanted to add to what they loved rather than force them to painfully migrate or wait until we reinvented all the features they used to execute on their missions.

For us, making that transition to microservices meant programmers own what they ship. Yes, they received an alert in the middle of the night like emergency personnel. You all know programmers are not paramedics, but hey, they were being brave!

We quickly adapted, and now individual teams can release a fix without escalation in most cases. A few phones light up; a few people jump in; they repair or roll back; and most everyone else gets a full night's sleep.

Microservices are agile. They're flexible. They're not risky. Bu they sure can be difficult! They require a whole different mindset and rails to deploy.

So, as I'm sure you've guessed by now...our transformation definitely wasn't a Disney story with a neat plot development and a happily ever after ending—or even a solid high school English paper with a clear beginning, middle, and end. Instead, a better metaphor might be an extended family at a Thanksgiving dinner table.

We had broken china. We had spilled gravy. We definitely had the relative with the crazy ideas. But we somehow all walked away from that gathering feeling satisfied. And we keep coming back, year after year.



And in the end, we did it: We brought that flagship fundraising to the cloud. We called it—nothing too crazy here—Blackbaud Raiser's Edge NXT.





And we called our first crew that worked on it the X-team. It all sounds a bit superhero, maybe even a little cloak and dagger— and it was! We were up against the status quo. We had to be brave in fighting for the people who want to save the world.



Now that you've had a crash course in metaphors, I'm ready to share with you my biggest takeaways from that time:

1. Start with culture.

- 2. Reiterate and stick to your principles
- 3. Be prepared to fail
- 4. And remember that code is a means to an end



#### Lesson 1: The hard stuff wasn't the code. It was the culture.

As we shifted to a microservices delivery model, X-team needed to run fast – and that was a change to our culture. Historically, we released code every two weeks. We shifted to every day.

It wasn't just a change in delivery model but a change in mindset, and for us it started with a culture of ownership.

When you give a scrum team ownership, you minimize dependencies and impacts. For example, if you and I both have services and a well-defined integration, I can change my shoes, and it won't affect you. And obviously, that's the way it should be—in development and in life.

But as we underwent transformation, we stumbled a bit, because we were a little too coupled. When one team ran into an issue, it held everyone up. Now, teams are going to have issues when you're moving this quickly. But when we're overly dependent and consist of seven teams with one stumble per week per team—you wind up at the end of the week without moving forward at all.

At that time, we had a quality assurance team. We would freeze code and hand it over to them for six weeks of testing—but you all know that it's never good for code to sit on the shelf. Technology moves too quickly to operate at a pace that includes dead stops. The lights are always green in the world of software development. The idea that higher quality comes from QA is archaic.

We instead aspired to keep our code in a constant state of goodness, ready to ship.

We had to accept some tough truths, namely that this quest for perfection was doomed to fail. And frankly, it was outdated. After all, no one looks back on the 1980s and says, "Yeah, the software sure was better then!"

We couldn't do regression testing, so that came with its own set of disciplines. We relied on automated tests in the background. And we planned for failure—not only to prevent it but to deal with it when it happens. When you have a room full of people accustomed to striving for perfection over iteration and evolution, that's a complete paradigm shift. It takes some bravery.

We needed to shift from taking all precautions to ship perfect software to finding and fixing issues before customers see them.

We learned to trust our customers the way they trust us—to know that their expertise will serve us better than anyone from inside our company. Programmers had to accept that answers don't come from their contemplation; they come from customers using this technology to drive their missions forward. We reoriented from considering customer feedback in our processes to fundamentally building our entire processes around that feedback, provided through many more channels than before—true user-centered design.

That said, the shift didn't start and stop with code and those working on it. It took a mindset adjustment across our entire enterprise—all the way to how we talk about our solutions.



## That takes me to takeaway #2: Reiterate and stick to your principles.

I want to interject a recent story from the COVID-19 trenches here, because it all comes down to principles. Several months ago, we faced an impasse that would determine our success for the rest of the year—how to keep our teams comfortable enough amidst so much uncertainty to keep innovating.

I attended a workshop in March from the NeuroLeadership Institute called "What Science Says Leaders Should Do" and learned that we live in three levels of threat.

To put it in terms of deadly animals, at level 1, you know someone's giant poisonous snake escaped in your town; you're aware of it, but it's not posing an immediate threat to you. At level 2, it's been confirmed that the snake is in your neighborhood, so you're more alarmed and feeling stress. And at level 3, you find the snake staring at you in YOUR yard. At level 3 you're letting go of complex thoughts and shifting into survival mode, making reflexive decisions. You're in fight or flight mode.

Healthy people spend their time in levels 1 and 2, but COVID-19 left the majority of people vacillating between levels 2 and 3, where they feel exhausted not by complex problem-solving but by the strain of sheer worry.

What we can do as leaders is increase as much certainty as possible to reduce the natural threat response. That means spending time helping people feel connected, engaged, and collegial despite physical distance and by thoroughly communicating what will change and when.



In the first month of our shift to an all-virtual workforce, we saw collaboration skyrocket, with a 57% increase in Slack posts and 44% increase in file sharing. By helping the team feel part of something bigger—helping our customers through a shared tough time—we helped shift out of survival mode and back to innovation.



Those same core principles—that openness and collaboration, plus a little bravery in abandoning the usual process—are also what made our transformation from on-premises to cloud possible. We lived by these heretofore unwritten rules:

- Keep your code in a constant state of goodness.
- Always be ready to ship.
- Don't break stuff.
- Keep your non-functional requirements at the forefront.
- Instrument, release and respond

And finally, be willing to try new things.



## But with the plan to try news comes takeaway #3: Be ready to fail.

That's right. Failure means discovery and improvement—but it takes a brave resolve to accept that truth. Think about how many times that first person to try honey probably got stung? Or how many times that intrepid early ice skater felt before learning to glide. And I already told you that the first Wright brother flight landed with a thud.

I'll give you an example from our team. We recently worked hard on an events management capability. We were pumped about it and knew our customers would love it. But when we started shipping, we realized that we weren't hitting the mark. In fact, no one was using it.

So, we went back to work. We focused on our early adopters. We adjusted and we celebrated the failure that brought us to a better experience for our customers and future customers.

It's easy to blame the team that falls behind forecast. But we shouldn't be measuring schedule. We should focus on *delight*. That fits into the solution-led growth strategy too. Traditionally, product managers have few or no meaningful interactions with customers. Those relationships fall to customer success without a streamlined way for customer success to share information with product management. How can that lead to the best solutions?

Product managers... engineers... all of us need that context of direct customer communication. We have to be brave and thank them for getting us to the right place, even if it's not as far in our journey as we'd intended. Why do we think we know what customers will love and how long it will take?

I'm proud to share that, since going generally available for US customers in our second quarter this year, we've seen a 130% increase in form submissions and a

100% increase in the number of registrations created. And in June we surpassed \$1 million in event registration fees and donations.

Create a culture where people—no matter their title, no matter their tenure—feel encouraged to speak. Listen to the people who have been here forever and the people just interning for a summer.

When we make clear problem statements and define our destination, we can encourage creative problem-solving without overdirecting. Coaching is different from step-by-step instructions, which only stifle innovators.

When we celebrate the diversity of opinions, we always pave a path to better solutions.

I'm convinced that this fundamental value of Blackbaud—that when we hire you, we've acknowledged your talent and potential to contribute ...and we want to hear what you have to say—is what has enabled our team to shift seamlessly to an all-remote workforce during COVID-19. And it's what has earned Blackbaud so many accolades as a company that genuinely celebrates diversity.

My advice here is to stop committing to DATES and start committing to what PROBLEMS you'll solve for your customers. You'll both get a lot further.



I mentioned that these lessons came into play in an accelerated and amplified way during COVID-19. During this challenging moment—when our customers not only grappled with shifting their operations to all-remote teams and, in many cases, staying afloat during extended closures—we listened to them and responded quickly. To list a few ways:

- We made it easy for churches to hold virtual small groups and stay connected while physically apart.
- We helped our museums and other arts and cultural organizations extend memberships that went unused during months of closures—and also

- empowered them with a Timed Entry capability to manage social distancing upon reopening.
- And we made some changes in Blackbaud Raiser's Edge NXT that I would be remiss not to share, now that you've know that product's back story.
  - We made sure that it seamlessly integrates with our supporter-led crowdfunding platform.
  - We streamlined sustainer gift processing to help grow stable monthly revenue without any added effort required from our customers.
  - And we made it easy to create new donation forms—a critical need for COVID-19-specific campaigns.

I'm proud of the Blackbaud team for driving these innovations and many others in a matter of weeks—for being able to act swiftly in a way that serves our customers when they needed more than a technology provider, but a technology partner. We couldn't have done it without the right culture and principles, and we couldn't have done it if we'd been afraid to fail.



# My final takeaway to share with you is this: Always remember that code is a means to an end.

Data drives outcomes and value, and software is means of delivery. Features aren't as important as data, because ultimately, it's data intelligence that brings value to our customers.

Anyone can write a mobile app now; the code is just a starting point. The value you bring is in taking intelligence and doing something for someone. We embedded analytics into the experience. The value of cloud is in data! When fundraisers use Blackbaud Raiser's Edge NXT, they get predictive next steps on actions. They have data informing their moves management—and there's no fairer boss than the numbers themselves.

And we are seeing it pay off for our customers! Just since the COVID-19 pandemic, we have witnessed:



The largest individual online fundraiser ever. That's Captain Tom, who completed a 100-lap garden challenge in the days before his 100th birthday, all the while raising money for National Health Services professionals and volunteers.



Food banks that implemented drive-through distribution to serve growing numbers of people in need due to job loss.



Schools and universities that shifted their own fundraising strategies to ensure that their own students and their families had the resources they needed to stay enrolled or, in some cases, to eat and keep the lights on.



Gardens that turned to online ticketing to provide people with a safe and relaxing respite from the pandemic on their beautiful grounds.



Healthcare institutions that turned to crowdfunding to support groundbreaking research into COVID-19 treatments and vaccines that could change all our lives.

I'm proud of these outcomes. And I'm proud to know how hard-fought they were on the software side.



We focused on our culture. We stuck fast to our principles. We not only prepared to fail, but we celebrated those failures and used them as learnings. We argued. We failed. We made it pretty uncomfortable at times.

And we tried to always remember that code is a means to a bigger end. A means to changing the world through technology.



### We were brave.

